NATIONAL WEATHER SERVICE
PRODUCT DESCRIPTION DOCUMENT (PDD)

TYPE: Experimental Forecast Product
DATE: December 1, 2010

Experimental Product – Digital wind and wave forecasts on inland lakes and reservoirs.

Feedback Period: December 1, 2010 – May 1, 2011

Part I - Mission Connection

A. **Product Description –** Wind and wave digital forecasts on inland lakes and reservoirs.

B. **Purpose –** To provide wind and wave hazard information for water management, safety officials and the public on inland lakes and reservoirs.

C. **Audience –** The intended audience is local, state and federal government decision makers as well as the local media and public.

D. **Presentation Format –** The digital graphical and text forecasts will be posted to the WFO web page in a graphic format. An example may be found at:

http://www.crh.noaa.gov/fgf/hydro/lake_fcst.php

E. **Feedback Method –** Feedback is encouraged and may be sent through an online survey at

http://www.weather.gov/survey/nws-survey.php?code=dwwfilr

For assistance, please contact:

John S. Eise
Deputy SSD Chief, Central Region Headquarters
7220 NW 101st Ter
Kansas City, MO 64153-2371
(816) 268-3144
John.Eise@noaa.gov

Part II – Technical Description

A. **Format and Science Basis –** The wind and wave forecasts are created within the Graphical Forecast Editor (GFE) using the NOAA/GLERL wind wave model. This model has been modified to accommodate input from the GFE. This allows the production of wind waves for the lakes using forecaster derived data for the duration of the forecast period. The wave model will calculate wave heights for points that are specified to be water, utilizing input of ice coverage, water surface temperature, 2 meter temperature, and wind speed. The wave model is dynamic, and relies upon the previous time frame's wave height and how the winds behave with respect to the wave distribution and character (direction and period).

B. **Product Availability –** These forecasts will be updated each time that the GFE grids are updated and published. The forecasts will be available for the today, tonight, and tomorrow periods (3 hour increments) in graphical and text formats.

C. **Additional Information –** None.